ERRATA SHEET

CHANGES TO ATTACHMENT TO RESOLUTION NO. R8-2005-0001

Language added is **underlined and bold**, language deleted is shown as ~~strike-through~~

Task 3: Watershed-wide Bacterial Indicator Water Quality Monitoring Program (page 8 of 15)

- Delete enterococcus from the list of monitoring constituents

  - Fecal Coliform
  - Escherichia Coliform (*E. coli*)
  - ~~Enterococcus~~
  - Total Suspended Solids
  - pH
  - Temperature
  - Electrical Conductivity
  - Dissolved Oxygen
  - Turbidity

- Table 5-9z – Watershed Minimum Required Weekly Sampling Station Locations

Station Number	**Station Description**
C1	Icehouse Canyon Creek
C2	Chino Creek at Schaeffer Avenue
C3	Prado Park Lake at lake outlet
C7	Chino Creek at Central Avenue
C8	Chino Creek at Prado Golf Course
M2	Cucamonga Creek at Regional Plant No. 1
M5	Mill Creek at Chino–Corona Road
S1	Santa Ana River at MWD Crossing
S3	Santa Ana River at Hamner Avenue
T1	Temescal Wash at Lincoln Avenue
TQ1	Tequesquite Arroyo at Palm Avenue

Frequency of sampling:
dry ~~weather~~ **season:** weekly
wet ~~weather~~ **season: two 30-day sampling periods during which a minimum of 5 samples are to be collected (at least one sample weekly) and if possible,** ~~for 5 storm events/year~~ **a** minimum of **5 of those samples must be from** ~~one sample/~~storm event**s**.

California Regional Water Quality Control Board
Santa Ana Region

August 26, 2005

Item: **13**

Subject: **Public Hearing: Consideration of Adoption of Proposed Basin Plan Amendment – Incorporation of Total Maximum Daily Loads for Bacterial Indicators in Middle Santa Ana River Watershed Waterbodies – Resolution No. R8-2005-0001**

DISCUSSION

At a Regional Board workshop on February 3, 2005, staff of the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) discussed a staff report entitled, "Staff Report on Bacterial Indicator Total Maximum Daily Loads in the Middle Santa Ana River Watershed" (TMDL Report). The TMDL Report proposed that the Regional Board consider amendment of the Implementation Plan of the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to incorporate the proposed TMDLs, which require actions to reduce bacterial indicators in Middle Santa Ana River (MSAR) Watershed waterbodies.

On June 24, 2005, the Regional Board conducted a second public workshop to receive further testimony on the TMDLs, which were revised in response to comments received. Based on additional comments, staff have revised the proposed Basin Plan Amendment (Attachment to Tentative Resolution No. R8-2005-0001 [Attachment A]). The recommended changes are described below. Attachment B contains Board Staff responses to comments received. Copies of the written comments are included in Attachment D.

In summary, the proposed TMDLs include:

A. Numeric targets based on fecal coliform and *E. coli*
B. Dry weather and wet weather TMDLs for fecal coliform and *E. coli*, with appropriate compliance schedules
C. Wasteload Allocations (WLAs) for point source discharges and Load Allocations (LAs) for nonpoint source discharges;
D. An explicit margin of safety applied to the TMDLs, WLAs and LAs;
E. An implementation plan and schedules for compliance with the TMDLs, numeric targets, WLAs, and LAs; and
F. A monitoring plan and schedule to assess the effectiveness of the TMDLs.

Based on the comments received and internal staff discussions on the proposed bacterial indicator TMDLs, Board Staff proposes the following major changes to the TMDLs/Basin Plan Amendment.

1. **Revisions to the proposed Dry Season compliance dates**
   The Regional Board received comments from the Riverside County Flood Control and Water Conservation District, the San Bernardino Flood Control District and the City of Corona

indicating that the proposed Dry Season Compliance date of 2012 should be extended to at least 2015 (Attachment B, Comments #21, 22, 30 and 35). These agencies indicated that a compliance date of 2012 would not be sufficient for projects to be designed, funding to be acquired, CEQA requirements to be met and projects to be implemented. These agencies believe that a Dry Season compliance date of 2015 (or later) would allow time for the necessary projects and/or plans to be implemented.

Board staff agree that additional time is warranted to allow bacterial source studies and other investigations, such as the work of the Stormwater Quality Standards Task Force, to be completed and appropriate control measures to be implemented. Therefore, staff proposes that the Dry Season compliance date be revised to indicate that compliance is to be achieved "As soon as possible, but no later than December 31, 2015". This proposed revision is shown in the Attachment to Resolution No. R8-2005-0001, Table 5-9x.

2. Revision of Numeric Targets

In the June 24, 2005 Staff Report and proposed Basin Plan amendment, staff proposed incorporating a 10% margin of safety in the Middle Santa Ana River Watershed Waterbodies TMDLs to account for unknowns associated with bacterial regrowth and die-off. However, staff incorrectly applied the margin of safety to the proposed fecal coliform and *E. coli* numeric targets. The margin of safety should only be applied to the TMDLs, WLAs and LAs. This error is corrected in Attachment to Resolution No. R8-2005-0001, 1.A Numeric Targets. The proposed fecal coliform numeric target is the existing Basin Plan objective and the proposed *E. coli* numeric target is based on USEPA *E. coli* criteria that roughly correspond with the health risk level associated with the existing Basin Plan fecal coliform objectives.

3. Clarification of *E. coli* Numeric Target

In the discussion of numeric targets, Board Staff propose to clearly indicate in the Basin Plan Amendment/TMDLs that the proposed *E. coli* provisions of the TMDLs may be revised based on the efforts of the Stormwater Quality Standards Task Force and the anticipated incorporation of *E. coli* objectives into the Basin Plan. The proposed language, which is reflected in the Attachment to Resolution No. R8-2005-0001, 1.A Numeric Targets, also specifies that adoption of *E. coli* objectives will be considered through the Basin Planning process. This will necessarily entail compliance with Water Code Section 13241, which requires the consideration of a number of factors, including economics, when setting new or revised water quality objectives.

4. Data Report Due Dates

Initially, Board Staff proposed that dischargers submit quarterly monitoring reports containing results of the proposed Watershed–Wide Monitoring Program. Comments received from the Riverside Flood Control and Water Conservation District and the San Bernardino County Flood Control District indicate that this reporting requirement would be burdensome (Attachment B, Comments #31 and 37. Therefore, Staff proposes that Seasonal Data reports be submitted twice a year; on May 31st of each year to report Wet Season data collected pursuant to the proposed monitoring program and December 31st of each year to report Dry Season data collected. This proposed revision is shown in Table 5-9y and Task 3 of Attachment to Resolution No. R8-2005-0001.

5. Monitoring Stations

The City of Riverside commented that the proposed Basin Plan amendment did not clearly indicate how compliance with the WLAs, LAs would be determined. Specifically, evaluating

compliance with the TMDLs, WLAs and LAs, which include the 10% margin of safety, at the proposed sampling stations (Tables 5-9z and 5-9a-a) results in more stringent regulation than complying with the existing Basin Plan objective for these receiving waters (Comment #16).

The intent of the proposed the watershed-wide monitoring program is to assess compliance with the proposed TMDLs, WLAs and LAs, as well as established Basin Plan REC1 objectives. The proposed Task 3, Watershed-Wide Bacterial Indicator Water Quality Monitoring Program, identifies stations that are to be considered for inclusion in the monitoring program proposal to be submitted by the identified responsible parties. However, the responsible agencies retain the flexibility to identify and propose alternative monitoring locations. Because it may require time to develop an appropriate monitoring strategy, staff now recommends that the due date for submitting the monitoring proposals be 6 months subsequent to approval of the Basin Plan amendment, rather than 3 months, as originally proposed. This proposed revision is shown in Table 5-9y and Task 3 of Attachment to Resolution No. R8-2005-0001.

6. Tasks 4 and 5: Requirements for Urban and Agricultural Dischargers

These proposed Tasks require urban and agricultural dischargers to develop proposed plans to conduct bacterial indicator source evaluation studies. These proposed plans are to be submitted within six months from the effective date of the Basin Plan amendment. The Basin Plan amendment language proposed initially did not require that specific schedules be identified in these plans for the completion of the source evaluation studies. Staff believes that it is appropriate to do so. However, staff also recognizes that the schedules may be contingent on the progress or outcome of other investigations, such as those sponsored by the Stormwater Quality Standards Task Force. Accordingly, language has been added to the proposed amendment that requires the inclusion of proposed schedules for completion of the source evaluation work. However, it is also explicitly stated that these schedules can include contingency provisions to account for the conduct and findings of other investigations.

In the case of the urban dischargers, revisions of the Municipal Storm Water Management Plan (MSWMP), Drainage Area Management Plans (DAMP) and Water Quality Management Plans (WQMP) are required to reflect the results of the urban source evaluation plan. The proposed Tasks do not specify explicit deadlines for the submittal of revised versions of these plans, since the magnitude and nature of the revisions is again likely to be contingent on the findings of the Stormwater Quality Standards Task Force and other investigations. Instead, the approach now used in the revised Basin Plan amendment (Tasks 4.2, 4.3, 4.4 and 4.5) is to require that the urban dischargers submit plans and schedules for review of the MSWMP, DAMP and WQMP within 90 days of notification by the Executive Officer of the need to do so. The proposed plans/schedules would then be considered for approval by the Regional Board or by the Executive Officer if no significant comments are raised during the public notice period.

In the case of agricultural dischargers, the proposed Basin Plan amendment language has also been modified to require submittal of a proposed Bacterial Indicator Agricultural Source Management Plan within 90 days of notification by the Executive Officer of the need to do so. The proposed plans/schedules would be implemented upon approval by the Regional Board.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS

The basin planning process has been certified by the Secretary of Resources as functionally equivalent to the requirement for the preparation of an Environmental Impact Report or Negative Declaration. The Regional Board is required to complete an environmental assessment of any changes the Board proposes to make to the Basin Plan. Staff prepared an Environmental Checklist (Attachment C to the June 24, 2005 TMDL Staff Report), determining that there would be no significant adverse environmental impacts from the proposed Basin Plan Amendment. Staff has reviewed the Environmental Checklist in light of the proposed changes to the Basin Plan amendment/TMDLs discussed above. No changes to environmental checklist are warranted; the staff determination that there would be no adverse environmental impacts from the proposed amendment remains valid.

STAFF RECOMMENDATION

Adopt Resolution No. R8-2005-0001, amending Chapter 5 of the Basin Plan to incorporate the Middle Santa Ana River Watershed Waterbodies Bacterial Indicator TMDLs shown in the Attachment to the Resolution.

ATTACHMENTS

Attachment A – Tentative Resolution No. R8-2005-0001, with attached proposed (revised) Basin Plan amendment

Attachment B – Responses to comments received

Attachment C – Environmental Checklist

Attachment D – Comment Letters

Attachment B

Response to Comments

CINDY LIN
US Environmental Protection Agency, Region IX
(Oral comments presented at the June 24, 2004 Regional Board workshop)

Comment #1:
US EPA fully supports the Middle Santa Ana River Watershed Waterbodies Bacterial Indicator TMDLs as proposed.

Response:
Comment noted.

ATI ESKANDARI
City of Corona
(Letter dated June 7, 2005)

Comment #2:
[D]ata collected in the Chino Basin Watershed and from Santa Ana River Reach 3 (SAR–3) in the Riverside Watershed supports the impairment for those identified reaches due to elevated pathogen indictor levels.

Response:
Comment noted.

Comment #3:
While Temescal Creek is tributary to SAR–3, it is downstream of all TMDL sampling locations in the Chino Basin and Riverside watersheds. Thus it is inconclusive and unsupportive [sic] that this watershed contributes to the impairments identified upstream.

We recommend that the Temescal Canyon Watershed be re–considered for inclusion in the TMDL as there is no supporting data to conclude its contribution to the identified impairments.

Response:
Board staff recognize that Temescal Creek is tributary to Santa Ana River, Reach 3 (SAR-3) and that its confluence with SAR–3 is downstream of most of the TMDL sampling locations. However, SAR–3 is 303(d) listed and all possible sources must be evaluated. As discussed in the February 2005 TMDL Report, Section 5.1.1, the Santa Ana River at the Prado Dam location had more than the minimum number of exceedances for listing a waterbody on the 303(d) List based on the single sample results. Temescal Creek is tributary to the Santa Ana River at Prado Dam; therefore, it is appropriate to include the Temescal Creek watershed as part of the Santa Ana River, Reach 3 TMDL.

Staff would also like to point out that when TMDL sampling locations were discussed and selected by the TMDL Workgroup for the TMDL monitoring program, it was understood that the chosen locations were representative of areas with similar land uses within the larger MSAR watershed. The TMDL Workgroup realized that it would not be possible or realistic to sample every drainage or every channel within each city's jurisdiction as part of the sampling effort. Since Temescal Creek receives runoff from areas with urban land uses, monitoring results from locations representing urban land uses are considered to be applicable to Temescal Creek as well. Additional monitoring to be conducted as part of the implementation plan of the proposed TMDLs will verify this approach. The TMDLs can be revised if and as necessary based on the monitoring data.

Comment #4:
Temescal Creek joins the Santa Ana River within the densely vegetated Prado Flood Control Basin where flow is detained behind the Prado Dam. It is extremely unlikely for water contact recreation to occur in this area due to dense vegetation, lack of access, and flow spreading.

Response:
The City of Corona did not present any data or supporting evidence that recreational uses do not occur within the Prado Basin. It could be argued that the wild and natural nature of the area behind Prado Dam in fact makes it a prime location for recreational activities to occur. Nonetheless, and more to the point,

the fact is that the Santa Ana River, Reach 3 throughout it's entirety is designated in the Basin Plan as REC1, supporting water contact recreation. Therefore, the TMDLs must ensure protection of the recreation beneficial use throughout the Reach unless and until that use is revised in the Basin Plan through the Basin Planning process. Recommendations for appropriate revisions to REC1 designations are being considered by the Stormwater Quality Standards Task Force (SWQSTF).

Comment #5:
[M]onitoring data from the Chino Basin watershed is not a good indicator of bacteria levels in the Temescal Canyon watershed as historical uses of the developed land are significantly different.

Response:
Regardless of historical land uses in the respective sub–watersheds, the current land uses in the urbanized portions of the Chino Basin watershed and in the Temescal Canyon watershed are similar, and, in fact, the sub-watersheds also have similar historical uses (i.e., citrus and other crop cultivation). When sampling locations were discussed and selected by the TMDL workgroup for the TMDL monitoring program, it was understood that the chosen locations were representative of areas with similar land uses within the larger MSAR watershed.

See also Response to Comment #50 in the June 24, 2005 Staff Report, Attachment B.

Comment #6:
The second step in TMDL preparation is linkage analysis wherein sources of coliform bacteria in the water are linked to observed conditions in the impaired waterbody. A sophisticated model of Chino Basin is being developed to correlate the sources with the impairment. However, taking an empirical look at the land uses and related historical sampling data clearly indicates that the highest levels of bacteria and most significant source are agricultural uses of the land, and in particular dairy farming (CAFOs).

Response:
Based upon storm water quality monitoring performed by Board staff in 1996–1998, the highest levels of bacterial indicators were associated with agricultural land uses. However, results from this same monitoring effort indicate very high levels of bacterial indicators (hundreds and thousands of times greater than water quality objectives) associated with urban land uses. Further, TMDL monitoring indicated excessive bacterial indicator levels associated with urban areas during dry weather conditions. Additional data are needed to more thoroughly evaluate bacterial levels associated with agricultural operations during dry weather conditions.

Comment #7:
While CAFOs are currently regulated to eliminate discharges up to the 25–year, 24–hour storm event, it is unclear if the permits are being enforced and that discharges have ceased. We believe that TMDL source evaluation efforts should concentrate on CAFO runoff from the Chino Basin watershed, and not urban uses.

Response:
See Response to Comment # 6, above, and Response to Comment #51 in the June 24, 2005 Staff Report, Attachment B.

Comment #8:
The proposed MSAR TMDL does not provide for a natural source exclusion. Other Regional Boards (San Diego and Los Angeles) have included allowable exceedances of single sample bacteria limits under wet weather conditions. These TMDLs have recognized that even relatively undeveloped watersheds exceed bacteria standards on occasion due to natural sources such as birds and other wildlife. We believe that the TMDL should include a natural source exclusion for wet weather similar to other approved bacteria TMDLs in the region.

Response:
Board staff are aware of the approaches used by other Regional Boards in their bacterial indicator TMDLs. Staff believe that it would be feasible and appropriate to take the natural exclusion approach as recommended by the City. However, at this time, there are no data for the MSAR watershed upon which to base a natural source exclusion. Existing data indicate that during dry weather, runoff from open space and natural land use areas is not a source of bacterial indicators and complies with the existing fecal coliform Basin Plan objective. With additional monitoring to develop an appropriate exclusion provision, Staff would support incorporation of an exclusion provision into a revised Middle Santa Ana River watershed TMDL. The SWQSTF effort may result in recommendations for a natural source or other type of exclusion.

Comment #9:
The proposed Task 3–Monitoring Program of the TMDL implementation plan should be delayed or revised until the outcome of the Storm Water Quality Task Force (Task Force). Results of the Task Force would indicate what constituents should be sampled for, the level of compliance, and points of compliance.

We recommend that Task 3 efforts begin after recommendations have been made by the Task Force, or that efforts proposed as part of the Task Force be given credit for this task.

Response:
See Response to Comment #7 in the June 24, 2005 Staff Report, Attachment B.

Comment #10:
The proposed margin of safety to account for bacteria re–growth is not supported by scientific data. Until there is sufficient scientific evidence on the rate, time and location of re–growth, it is presumptive to apply a re–growth factor to the numeric target since samples might be subject to already having re–growth. We recommend that the margin of safety factor for re–growth be removed from the proposed TMDL, or addressed through a different manner.

Response:
See Responses to Comments #3, 18, 80 and 81 in the June 24, 2005 Staff Report, Attachment B.

Staff also notes that the margin of safety was incorrectly applied to the proposed fecal coliform and *E. coli* numeric targets. The margin of safety should only be applied to the TMDLs, WLAs and LAs. As shown in Attachment to Resolution No. R8-2005-0001, 1. A Numeric Targets, the proposed numeric targets no longer include the 10% margin of safety; the proposed fecal coliform numeric target is the existing Basin Plan objective and the proposed *E. coli* numeric target is based on USEPA's *E. coli* criteria that roughly correspond to the health risk level associated with the existing Basin Plan fecal coliform objectives.

RODNEY W. CRUZE
City of Riverside
(Letter dated June 22, 2005)

Comment #11:
The City is concerned about the significant changes that have been made to the proposed basin plan amendment for a bacterial TMDL in the middle Santa Ana River (SAR).

It was understood that the use of a fecal coliform indicator as a water quality standard would be changing in the future. Board staff made clear at that time that it would be necessary to move forward with a TMDL for that indicator in order to comply with deadlines dictated by the Clean Water Act and the courts. As we read the proposed amendment at this point in time, it appears that the scope has been significantly expanded. Specifically, numeric "targets" for *E. coli* and a 10% margin of safety in the objectives have been added at the eleventh hour. The City requests that the Board remove numeric limitations or targets for *E. coli* and provide clarification on the use of the safety factor it has proposed.

Response:
Board staff provided the reasoning for adding *E. coli* as an alternative numeric target in Response to Comment #2 in the June 24, 2005 Staff Report, Attachment B. In addition, Board staff stated its reasons for using a 10% margin of safety in Response to Comment #3 in the June 24, 2005 Staff Report, Attachment B. Board staff continue to believe that the inclusion of *E. coli* and the 10% margin of safety is appropriate, for the reasons already described. However, as indicated in the Response to Comment #10, above, the margin of safety is now proposed to be applied to the TMDLs, WLAs and LAs, and not the numeric targets.

Comment #12:
The inclusion of a numeric target for *E. coli* is inappropriate since it is not a legally adopted standard. We agree with the staff report when it states that 126 *E. coli* organisms/100ml is correlated to the 200 fecal coliform organisms/100ml but this is a tenuous relationship at best. Staff appear to be relying on the 1986 EPA criteria document for the proposed *E. coli* target. By using this value they are assuming a risk factor that may not be appropriate for the water bodies in question.

The question of what is the appropriate risk factor to use is being addressed by the Stormwater Quality Standards Task Force. Time should be given for them to complete this study.

Response:
It is entirely appropriate to use guidelines as the basis of numeric targets for a TMDL. Indeed, USEPA recommended that numeric targets based on *E. coli* be included in the TMDLs (see Comment #2 in the June 24, 2005 Staff Report, Attachment B), since it is now recognized that *E. coli* is a better indicator of public health risk resulting from water contact recreation.

The Basin Plan does not specify different fecal coliform objectives based on differing frequency or magnitude of water contact recreational use and resultant health risk in specific waterbodies. Rather, the Basin Plan specifies a single set of fecal coliform objectives that apply to all inland surface waters designated REC1. This is a matter being explored by the SWQSTF. Until such time as the recommendations of the SWQSTF are developed and considered through the Basin Planning process, it is appropriate to specify numeric targets for *E. coli* that are comparable to the existing Basin Plan fecal coliform objectives. The proposed TMDLs/Basin Plan amendment includes recognition of the fact that

the SWQSTF may make recommendations for alternative *E. coli* water quality objectives that, if incorporated into the Basin Plan, will necessitate revision of the TMDLs.

Comment #13:
Staff is aware of these issues [SWQSTF efforts] and is careful not to call the *E. coli* numbers limits by substituting the word "target." The problem is that a "target" is not defined in the amendment. What happens if you exceed a target? Does the Board have the authority to require any action based on the failure to meet a target? If it does then it is not a target, it is a standard. If it doesn't then what is the point?

Response:
The use of the term "target" is not novel or particular to these proposed TMDLs. TMDLs require a quantitative numeric value or target necessary to implement existing water quality standards, which include water quality objectives and beneficial uses. The numeric targets are interpretations of existing water quality standards, not water quality standards themselves. Numeric targets are not directly enforceable against dischargers absent a corresponding permit provision that implements associated wasteload/load allocations.

If a numeric target is exceeded, but the TMDLs, WLAs and LAs have been met after implementation of control measures, the Regional Board would evaluate whether the TMDLs and allocations were appropriately set and make adjustments as needed. Further, given the iterative nature of TMDLs, the Regional Board could also deem the numeric target inappropriate and make necessary adjustments. Staff anticipates that revision of the proposed *E. coli* numeric target will occur based on the recommendations of the SWQSTF.

Comment #14:
Numeric limits or targets should not be introduced into the Basin Plan until they have gone through the formal standard setting process.

Response:
See Response to Comment #13. Numeric targets are not water quality standards and therefore, the processes required when adopting such standards do not apply. The Regional Board is expected to consider the adoption of water quality objectives based on *E. coli.* This will require the formal standard setting process, including consideration of the factors specified in California Water Code §13241.

Comment #15:
The Board should first adopt the new pathogen standards, review the use designations and then determine if a TMDL is necessary. This amendment suggests a standard and an associated WLA when it might not be needed.

Response:
As indicated in the TMDL Report and discussed above, Board staff, along with the SWQSTF are reviewing bacterial indicators and beneficial use designations. It is not clear at this time when this process will be completed. The Regional Board has made a commitment to adopt these TMDLs according to a previously adopted schedule and it is the Board's intent to keep that commitment. The proposed Basin Plan amendment includes commitments for review and revision of the TMDLs and their components should new bacterial indicators or new beneficial use designations be adopted. Board staff believe that the proposed Basin Plan amendment, the proposed compliance schedules and the

proposed implementation tasks and associated schedules, take the SWQSTF efforts into account and are appropriate.

The proposed amendment does not "suggest" a standard; rather, it identifies the numeric targets, allocations and an implementation plan necessary to achieve existing standards. See Response to Comments #12, #13, and #14, above.

Comment #16:
The use of a safety factor may be appropriate but the proposed amendment needs to be clear where that standard must be met. We would argue and we hope the Board agrees that it is not appropriate at the point of use.

If re–growth is a concern then the safety factor should only apply to water before it gets to the REC–1 designated waters.

It is, therefore, our position that a safety factor at the point of use is not appropriate. If a safety factor is to be applied, further clarification including where the standard applies, is necessary.

Response:
See response to Comment #10. The 10% margin of safety is applied to the TMDLs, WLAs and LAs to assure that the water quality standards in the receiving waters are achieved.

Task 3 of the proposed Basin Plan amendment requires development and implementation of a watershed–wide monitoring program. One of the purposes of the monitoring program is to address compliance with the TMDLs, WLAs, and LAs as well as to ensure that the established water quality objectives are being achieved. The proposed amendment includes proposed monitoring locations for determining compliance; however, if dischargers do not believe that the proposed monitoring locations are appropriate to represent their contribution and to allow a determination of compliance with the WLAs or LAs, dischargers have the option to propose alternative monitoring locations for consideration by the Regional Board as indicated in the proposed Basin Plan amendment. Recognizing that additional time may be required for dischargers to identify appropriate monitoring locations, staff recommends that the due date for Task 3 be extended from 3 months (after approval of the TMDL) to 6 months (see Attachment to Resolution No. R8-2005-0001, Table 5-9y and Task 3).

Comment #17:
If the Board feels that they must include *E. coli* targets then we request that the single sample maximum be removed or modified. EPA's proposed criteria include four possible classifications for single sample maximum allowable density. These values are meant as management tools. Unlike maximum criteria used in toxic standards, these numbers do not relate to an acute endpoint or time of exposure.

One of the things that the Board will have to determine in the future is how single sample exceedances will be looked at when determining if a water body needs a TMDL since you can and will have single sample exceedances while you are complying with geometric mean standards.

Tying this in with our previous comment; if we aren't going to be managing based on the "target" value then the single sample maximum isn't needed and should not be included in this amendment.

[S]hould the Board determine that they want a single sample maximum we request that it be based on something other than the requirement for a "Designated Beach Area." As was stated earlier, EPA proposed four different categories of use and associated maximum allowable densities. What they didn't put in the criteria documents are definitions of these categories. The definitions will have to be formulated at the time of standard setting by the Board.

We respectfully request that if the Board includes a single sample maximum for *E. coli* in this amendment, that it be based on the Lightly Used Full Body contact Recreations category. This number can be refined when the standard setting process is complete and the use categories have been formally determined.

Response:
See Response to Comment #12. The SWQSTF is expected to make recommendations for appropriate *E. coli* objectives that take into account the four use categories identified in USEPA's criteria document. When and if these recommendations are adopted and approved through the Basin Planning process, it will be appropriate to revise the proposed TMDLs accordingly. Please see Task 6 in the proposed Basin Plan amendment

Staff in unclear on what basis the City is defining the waterbodies in the MSAR watershed as being "Lightly Used Full Body Recreation". If this is based on the initial results of the Beneficial Use Survey currently being conducted by SAWPA through a Clean Water Act Section 205(j) grant (see Comment #30, below), staff needs to emphasize that the study has not yet been completed and therefore, we believe it would be inappropriate to use these results at this time. We also understand that the SWQSTF is undertaking a much more comprehensive evaluation of the extent of recreational activity in some of the subject waterbodies, with the goal of characterizing actual and potential use. Staff believes it is appropriate to allow completion of that effort by the SWQSTF and to revise the TMDLs in future based on recommendation from the SWQSTF that result in changes to the Basin Plan.

Regarding placement of a waterbody on the Clean Water Act Section 303(d) List and subsequent TMDL development, the manner in which the state will view single sample exceedances is described in Section 3.3 of the State Board's Water Quality Control Policy for Developing California's clean Water Act Section 303(d) List (Listing Policy). Staff also points out that the fecal coliform water quality objective and the *E. coli* criteria recommended by USEPA do not allow exclusion of the single sample portion. Both the 30-day geometric mean and the single sample maximum have to be met.

ATI ESKANDARI
City of Corona
(Letter dated June 23, 2005)
(Oral comments presented at the June 24, 2004 Regional Board workshop)

RUDY FANDEL
City of Corona
(Oral comments presented at the June 24, 2004 Regional Board workshop)

Comment #18:
Assuming that dry weather flows from urban areas within the Temescal Canyon sub–watershed are found to be a leading source of bacteria to the impaired waterbodies, one of the alternatives to meet the proposed pathogen TMDL could be diversion of dry weather flows from the municipal storm drainage system to a treatment plant for treatment and discharge back into the receiving waters. Other alternatives to address dry weather and first flush flows must also be considered during TMDL implementation and could include regional BMPs identified through the regional study performed by the Riverside County Permittees as required by the Riverside County MS4 NPDES Permit.

Response:
Comment noted. Board staff expects that as part of TMDL implementation, thorough evaluations will be conducted of many bacterial indicator source management alternatives, including diversion and treatment, and source control measures BMPs.

Comment #19:
Currently, the wastewater treatment plants operated by City of Corona do not have capacity to treat additional flows from non–sanitary sewer sources. One or all of the treatment plants would have to be upgraded to accept the additional flows. In addition, there are specific concerns regarding toxicity that may be found in dry weather runoff.

Response:
The proposed TMDLs do not prescribe diversion or any other methods for achieving compliance. As the City itself pointed out (Comment #18, it will be necessary to conduct the source evaluation studies required in Task 4.1 to identify appropriate control measures.

See also Response to Comments #24, 25, 26 in the June 24, 2005 Staff Report, Attachment B.

Comment #20:
[T]he alternatives to meet dry weather TMDL compliance cannot be developed until at least Tasks 3 and 4 of the proposed TMDL Implementation Plan have been implemented.

Response:
See response to Comments #18 and 19.

Comment #21:
Public agencies must also consider budget cycles when undertaking a large–scale project effort, which could extend the proposed schedule. For this reason, a more reliable schedule to achieve dry weather

compliance would be approximately 10 years from the adoption of the TMDL if this alternative were selected.

Response:
Board staff agree that additional time is warranted to allow bacterial source and other related studies to be completed and appropriate control measures to be designed, permitted and implemented. Therefore, staff proposes that the Dry Season compliance date be revised to indicate that compliance is to be achieved "As soon as possible, but no later than December 31, 2015".

Comment #22:
Treatment costs for the additional flow would incur roughly an additional operating cost of $2.1 million annually, assuming 6 cfs of dry weather flow is diverted and treated at a daily cost of $1,145 MGD to treat. This cost does not include collection system operation and maintenance, which we anticipate could be as much as twice the cost to treat. Therefore, securing on–going funding sources must also be considered in the implementation schedule.

Response:
Comment noted. See responses to Comment #18, 19 and 21.

Comment #23:
All sampling as part of this TMDL study were collected along the SAR–3 upstream of the Basin. Some sampling was performed downstream of the Prado Dam along SAR–2, however all Chino Basin Streams, SAR–3 and Temescal are tributary to this point. Water quality at this site is also affected by wetlands processes in the Prado Basin. Thus it seems inconclusive that the Temescal watershed contributes to the pathogen impairment identified for SAR–3 and we believe should not be included in this TMDL.

Response:
See Responses to Comments #3 and #5.

MATT YEAGER
San Bernardino County Flood Control District
(Oral l comments presented at the June 24, 2004 Regional Board workshop)

Comment #24:
The San Bernardino County Flood Control District (District) has been an active participant in the TMDL Workgroup and in the TMDL development process.

Response:
Comment noted.

Comment #25:
The District supports the following proposed revisions to the TMDL: separate dry season and wet season compliance dates; flexible deadlines for revisions of the Water Quality Management Plan (WQMP) and Municipal Stormwater Management Plan (MSWMP); the approach for addressing the Phase II and industrial sources; and acknowledgement of the efforts of the Stormwater Quality Standards Task Force.

Response:
Comment noted.

Comment #26:
The cost evaluation lacks detail and is not specific enough to evaluate cost of implementation. The TMDL Report references Prop 13 projects for cost estimates, however it is unclear which Prop 13 projects were used for comparison. References for the Cost Estimates should be provided.

Response:
See the June 24, 2005 Staff Report – Response to Comments #9, 26, 27, 43 and 61 (Attachment B).

Comment #27:
A better estimate of the number of subsurface wetlands that would be needed to comply with the TMDL is needed in order to evaluate the overall potential costs.

Response:
See the June 24, 2005 Staff Report – Response to Comments #26 and 27.

Comment #28:
The TMDL Report references the Prop 13 Phase II Monitoring and Modeling Program being conducted by SAWPA and USGS. It is unclear how the results will be used and how the study is related to the monitoring program requirements.

Response:
See the June 24, 2005 Staff Report – Response to Comment # 42 and 59.

As discussed at several TMDL Workgroup meetings, the purpose of the monitoring and modeling study is to provide up front assistance to the agricultural operators and urban runoff managers in identifying sources of bacteria within specific land use categories. This is essentially the urban source evaluation program and agricultural source evaluation program as required in the Basin Plan amendment/TMDL (Task 4.1 and Task 5.1, respectively). Stakeholders have indicated a desire for the Regional Board to

provide funding for TMDL implementation, and therefore, in coordination with SAWPA , this project provides a jump start on implementation. However, the District is not required to use the study results or the modeling tools that are developed for source evaluation and is free to develop an alternative study approach.

Comment #29:
The Beneficial Use Survey, which is a USEPA funded Water Quality Planning Grant (205j), may affect the bacterial indicator water quality objectives being developed by the Storm Water Quality Standards Task Force and/or the TMDL numeric targets, and therefore should be discussed in the TMDL Report and Basin Plan amendment.

Response:
See Response to Comments #12 and 17, above. As with the Prop 13 Monitoring and Modeling Project, SAWPA staff, along with the support of Regional Board staff were instrumental in securing funding to support an evaluation of the extent to which the subject waterbodies are being used for recreational purposes. As noted by District staff in Comment #32 (below), this information will be useful for the development of appropriate water quality objectives, a task of the Stormwater Quality Standards Task Force. Staff believe that a full discussion of this effort is outside the scope of the Basin Plan amendment. There are additional Task Force projects and efforts that could result in revisions to the TMDLs in the future. Again, it is not appropriate to reference and discuss all of these projects in the Basin Plan amendment. Instead, the appropriate approach is to recognize the Task Force effort and indicate the Regional Board's commitment to review and revise the TMDLs based on the results, as is identified in Task 6 – Review and Revision of the TMDL (TMDL Re-opener)

Comment #30:
Given that USEPA approval of the TMDL will occur in mid-2006, approval of the urban source evaluation plan would occur in mid-2007 and resulting needed revisions to the Water Quality Management Plan (WQMP) and Municipal Stormwater Management Plan (MSWMP) would occur in mid-2009, only 3.5 years would be left for achieving compliance with the Dry Season compliance date of 2012. This is not sufficient time to complete project of development and design, comply with CEQA requirements, secure funding and build projects. Dry Season compliance by 2015 is a more reasonable schedule.

Response:
See Response to Comment # 21. Board staff recommends that the dry season compliance date be revised to "as soon as possible but no later than 2015".

Comment #31:
Quarterly reporting of results is not needed. Biannual or annual reporting coordinated with the Annual Stormwater Program Report would be appropriate.

Response:
Staff agree that semi-annual reporting that is tied into evaluating compliance with the Dry Season TMDLs and the Wet Season TMDLs is appropriate. As shown in the Attachment to Resolution No. R8-2005-0001, revision of the quarterly reporting dates to semi-annual is proposed. The first semi-annual report would be due May 31 of each year to capture the Wet Season sampling period, and the second report would be due December 31 of each year to capture the Dry Season sampling period.

Comment #32:
Including *E. Coli* as a numeric target at the proposed levels is inappropriate since the target should be based on beneficial use surveys. Since the Stormwater Quality Standards Task Force is undertaking this effort, including *E. Coli* as a target, is also premature.

Response:
See Response to Comment #12.

Comment #33
The bulk of the Middle Santa Ana River Watershed is in San Bernardino County. Consequently, the costs to San Bernardino County for diversions and treatment, such as described by Riverside County Flood Control District, will be 2 to 3 times what Riverside County may have to pay.

Response:
Board staff do not agree that San Bernardino County comprises the bulk of the MSAR watershed or that the County's costs will be 2 to 3 times greater than what Riverside County may have to pay. In the TMDL Report, Board staff may have underestimated the total land acreage for Riverside County within the MSAR watershed. In reviewing maps for the MSAR watershed, it appears that the land acreages are nearly equal. Further, the populations for the two counties areas within the watershed are likely roughly equal also.

Comment #34
Extremely high levels of enterococcus organisms were detected in Santa Ana River water during a particular stormwater sampling event. This indicates that there is a tremendous source out there. If we go forward without really having a clear understanding, we are not going to be successful.

Response:
Board staff agree that there is a significant bacterial problem in the Middle Santa Ana River watershed. Further, Board staff agree that a clear understanding of conditions within the watershed is vital to successfully addressing the bacteria problem. The proposed implementation plan in the proposed Basin Plan amendment is based upon just such an approach. Regarding the enterococcus levels, Board staff is not proposing the use of enterococcus as an alternative bacterial indicator for these TMDLs.

STEVE STUMP
Riverside County Flood Control and Water Conservation District
(Letter dated June 24, 2005)

TOM RHEINER
Riverside County Flood Control and Water Conservation District
(Oral l comments presented at the June 24, 2004 Regional Board workshop)

Comment #35:
Although dry weather flow from urban sources are minimal and generally infiltrate prior to receiving waters, seven (7) years is not adequate time to budget, design, construct and implement capital improvements necessary to divert dry weather flows from MS4s to treatment facilities. Further, setting 2012 as a compliance deadline to achieve numeric targets for dry weather flows would require planning efforts for such facilities prior to completion of the Task Force effort.

The District recommends extending the target compliance date for dry weather flows to 2015. This will give public agencies approximately nine years to complete the work of the Task Force relating to appropriate Recreation use designations and corresponding objectives, conduct source investigations, explore emerging pathogen control BMPs and seek funding for capital projects or retrofits.

Response:
See Response to Comment # 21.

Comment #36:
The District's position was not to suggest the implementation of an interim *E. Coli* standard at this time, but was to suggest that implementation of the TMDL should occur only after an appropriate indicator and numeric target for pathogen indicators have been determined by the Task Force. While we understand the Regional Board's need to fulfill a commitment to complete this TMDL, we believe the inclusion of an interim *E. Coli* standard at this time would be counterproductive to the efforts of the Task Force.

Response:
See Response to Comments #11and 12.

Comment #37:
The addition of sites and increased frequency of bacterial TMDL sampling requires additional staff time and labor costs, and the requirement for quarterly reporting will be an additional increase on the demand of staff time. The District recommends annual reporting in place of quarterly reports such that compiling the TMDL monitoring reports may be incorporated into the regular annual reporting process associated with the MS4 permits.

Response:

See Response to Comment #31.

MARK NORTON
Santa Ana Watershed Project Authority (SAWPA)
(email communication dated June 15, 2005)

Comment #38:
On page 15 of 15 of the Attachment 1 to Resolution No. R8–2005–0001, last footnote on the page, SAWPA should be on the list of participants on the SWQSTF. The footnote should also indicate that SAWPA is serving as the administrator for the Storm Water Quality Standards Task Force. SAWPA is a named party of the task force agreement and is also helping to fund the study.

Response:
Staff appreciates this comment. The omission of SAWPA from the list was an oversight. As shown in the Attachment to Resolution No. R8-2005-0001, Task 6, staff proposes to appropriately reference SAWPA's role in the SWQSTF.

Attachment C

Environmental Checklist

ENVIRONMENTAL CHECKLIST

I. BACKGROUND

1. **Project title:** *Basin Plan amendment to incorporate Pathogen TMDLs for Santa Ana River–Reach 3, Mill Creek–Prado Area, Cucamonga Creek–Reach 1, Chino Creek–Reach 1, Chino Creek–Reach 2, and Prado Park Lake in the Middle Santa Ana River Watershed*

2. **Lead agency name and address:** *California Regional Water Quality Control Board, Santa Ana Region, 3737 Main Street, Suite 500, Riverside, CA 92501-3348*

3. **Contact person and phone number:** *Hope Smythe (909) 782- 4493*

4. **Project location:** *Middle Santa Ana River Watershed, San Bernardino and Riverside Counties*

5. **Project sponsor's name and address:** *California Regional Water Quality Control Board, Santa Ana Region, 3737 Main Street, Suite 500, Riverside, CA 92501-3348*

6. **General plan designation:** *Not applicable*

7. **Zoning:** *Not applicable*

8. **Description of project:** *Adoption of a Basin Plan amendment to incorporate Pathogen TMDLs for Santa Ana River–Reach 3, Mill Creek–Prado Area, Cucamonga Creek–Reach 1, Chino Creek–Reach 1, Chino Creek–Reach 2, and Prado Park Lake. The TMDLs establish wasteload allocations and load allocations for allowable pathogen inputs by all identified sources that discharge to Middle Santa Ana River waterbodies. The intent is to achieve numeric, water quality targets that will protect the beneficial uses of the waterbodies. The Basin Plan amendment includes an implementation plan that details the actions required by the Regional Board and other responsible parties for implementing the TMDLs.*

9. **Surrounding land uses and setting:** *Not applicable*

10. **Other public agencies whose approval is required:** *The Basin Plan amendment must be approved by the State Water Resources Control Board, the Office of Administrative Law, and the U.S. Environmental Protection Agency before it becomes effective.*

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

II. DETERMINATION

On the basis of this initial evaluation:

X I find that the proposed project COULD NOT have a significant effect on the environment.

____ I find that the proposed project MAY have a significant effect on the environment. However, there are feasible alternatives and/or mitigation measures available that will substantially lessen any adverse impact. These alternatives are discussed in the attached written report.

____ I find that the proposed project MAY have a significant effect on the environment. There are no feasible alternatives and/or feasible mitigation measures available that would substantially lessen any significant adverse impact. See the attached written report for a discussion of this determination.

Hope Smythe
Signature

July 7, 2005
Date

Hope Smythe
Senior Environmental Specialist

III. ENVIRONMENTAL IMPACTS

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				X
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in ¤15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to ¤15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?				
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
VIII. HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on-site or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
X. MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XI. NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XII. POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?				X
XIV. RECREATION - Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X
XV. TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
XVII. MANDATORY FINDINGS OF SIGNIFICANCE -				

CEQA Checklist

Question	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ('Cumulatively considerable' means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				X

Attachment - Environmental Checklist

Discussion of Environmental Impacts

Explanation of Environmental Checklist "Less than significant" Answers

Note: Adoption of the Basin Plan amendment to incorporate Bacterial Indicator TMDLs for Middle Santa Ana River Watershed waterbodies will not have any direct impact on the environment. Implementation of actions necessary to achieve the TMDLs may affect the environment, as described below. However, the intent of TMDL implementation is to restore and protect the water quality of the waterbodies and their beneficial uses. Any potential adverse environmental effects associated with TMDL implementation will be subject to project-specific CEQA analysis and certification to assure appropriate avoidance/minimization and mitigation.

IV. Biological Resources (b)

VIII. Hydrology and Water Quality (f)

XVII. Mandatory Findings of Significance (a), (b)

The proposed TMDLs call for reductions in bacterial indicator contributions to the waterbodies. Adoption of the TMDL Basin Plan amendment will not result in any direct environmental impacts. However, it also includes the explicit recognition that implementation of actions necessary to implement the TMDLs may effect the environment. Nevertheless, any such potential adverse environmental effects will be subject to project–specific CEQA analysis and certification to assure appropriate avoidance/minimization and mitigation of such impacts.

XVI. Utilities and Service Systems (b), (c)

The proposed TMDLs call for reductions in bacterial indicator contributions to the waterbodies from storm drainage systems. To achieve these reductions, modifications to storm drainage systems may be necessary. Connection of existing storm drainage systems to sewer systems may require collection and/or wastewater treatment plant modifications/expansions, with attendant construction-related environmental effects. In addition, wastewater treatment plant modifications may be needed to meet the bacterial indicator wasteload allocations. Any such projects associated with sewer or storm drainage systems modifications would be subject to further, case-specific environmental review and certification.

Attachment D

Comment Letters

From: "Mark Norton" <MNorton@sawpa.org>
To: <Hsmythe@rb8.swrcb.ca.gov>
Date: 6/15/05 10:57AM
Subject: Middle SAR Pathogen TMDL Staff Report Attachment A

Hope,
On page 15 of 15 of the Attachment A to Resolution No. R8-2005-0001, last footnote on page, could you please include SAWPA to the list of participants on the task force and indicate that SAWPA is serving as the administrator for the Stormwater Quality Standards Task Force? In case you were not aware, SAWPA is a named party of the task force agreement and is also helping to fund the study. Thanks!

Mark R. Norton P.E.
Water Resources and Planning Manager
Santa Ana Watershed Project Authority
11615 Sterling Ave.
Riverside, CA 92503
951-354-4221

CC: <brice@rb8.swrcb.ca.gov>

PW004405

OFFICE OF: PUBLIC WORKS DEPARTMENT

815 WEST SIXTH STREET, P.O. BOX 940, CORONA, CALIFORNIA 92878-0940

(951) 736-2447
(951) 269-3627 (FAX)
atie@ci.corona.ca.us

CORONA CITY HALL - ONLINE, ALL THE TIME (http://www.discovercorona.com)

June 7, 2005

Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

RE: Comments on Middle Santa Ana River Bacterial Indicator TMDL Staff Report and Basin Plan Amendment

City of Corona would like to take this opportunity to provide comments regarding the proposed Middle Santa Ana River (MSAR) Bacterial Indicator TMDL as described in the TMDL Staff Report and the proposed Basin Plan Amendment language. We see an urgent need for the Santa Ana Regional Water Quality Control Board staff to address the shortcomings and unsupported conclusions presented in the Staff Report prior to adoption of the proposed TMDL.

The first step in preparing a TMDL is problem identification, which identifies those reaches failing to support all designated beneficial uses. Analysis of historical sampling data collected throughout the MSAR watershed appears to be the method in which those reaches were identified. In this TMDL study, data collected in the Chino Basin Watershed and from Santa Ana River Reach 3 (SAR-3) in the Riverside Watershed supports the impairment for those identified reaches due to elevated pathogen indicator levels. However, it is noteworthy that all samples supporting the impairments for those reaches, including SAR-3, in this TMDL were taken upstream of the Temescal Canyon Watershed. While Temescal Creek is tributary to SAR-3, it is downstream of all TMDL sampling locations in the Chino Basin and Riverside watersheds. Thus it is inconclusive and unsupportive that this watershed contributes to the impairments identified upstream. Temescal Creek joins the Santa Ana River within the densely vegetated Prado Flood Control Basin where flow is detained behind the Prado Dam. It is extremely unlikely for water contact recreation to occur in this area due to dense vegetation, lack of access, and flow spreading. Samples downstream of Prado Dam also show some reduction in bacteria levels, indicating that some treatment is occurring through the detainment process. In addition, monitoring data from the Chino Basin watershed is not a good indicator of bacteria levels in the Temescal Canyon watershed as historical uses of the developed land are significantly different. We recommend that the Temescal Canyon Watershed be re-considered for inclusion in the TMDL as there is no supporting data to conclude its contribution to the identified impairments.

The second step in TMDL preparation is linkage analysis wherein sources of coliform bacteria in the water are linked to observed conditions in the impaired waterbody. A sophisticated model of Chino Basin is being developed to correlate the sources with the impairment. However, taking an empirical look at the land uses and related historical sampling data clearly indicates that the highest levels of bacteria and most significant source are agricultural uses of the land, and in particular dairy farming (CAFOs). While CAFOs are currently regulated to eliminate discharges up to the 25-year, 24-hour storm event, it is unclear if the permits are being enforced and that discharges have ceased. We believe that TMDL source evaluation efforts should concentrate on CAFO runoff from the Chino Basin watershed, and not urban uses.

The proposed MSAR TMDL, unlike other bacteria TMDLs recently approved in the region, does not provide for a natural source exclusion. The Malibu Creek and Santa Monica Bay Beaches TMDLs in the Los Angeles Region, and the draft TMDL for beaches and creeks in the San Diego region have included allowable exceedances of single sample bacteria limits under wet weather conditions. The Technical Advisory Committee for the Santa Monica Bay Beaches TMDL referenced in the Malibu Creek TMDL staff report recognized that "even relatively undeveloped watersheds exceed bacteria standards on occasion due to natural sources such as birds and other wildlife" (Los Angeles Regional Water Quality Control Board Staff Report, January 2004). The MSAR TMDL does not account for natural exceedances and does not allow for this incorporation even though no wet weather samples were taken from the undeveloped areas as part of this study. We believe that the TMDL should at minimum, include a natural source exclusion for wet weather similar to other approved bacteria TMDLs in the region.

The proposed Task 3-Monitoring Program of the TMDL implementation plan should be delayed or revised until the outcome of the Storm Water Quality Task Force (Task Force). Results of the Task Force would indicate what constituents should be sampled for, the level of compliance, and points of compliance. For example, a reach that is currently pathogen impaired or tributary to an impaired waterbody may be recommended to have a different water quality standard due to a revised beneficial use designation. In some cases, the recreational beneficial use may no longer apply. Therefore within that reach, compliance strategies may change. We therefore recommend that Task 3 efforts begin after recommendations have been made by the Task Force, or that efforts proposed as part of the Task Force be given credit for this task.

The proposed margin of safety to account for bacteria re-growth is not supported by scientific data. Until there is sufficient scientific evidence on the rate, time and location of re-growth, it is presumptive to apply a re-growth factor to the numeric target since samples might be subject to already having re-growth. We recommend that the margin of safety factor for re-growth be removed from the proposed TMDL, or addressed through a different manner.

Thank you for the opportunity to provide these comments. As a municipality, we are committed to ensuring the safety and welfare of our citizens including water quality protection; however, we also need to ensure that resources and efforts are not unduly spent. If you have any questions regarding our comments please contact Michele Colbert at (951) 736-2248

Sincerely,

Ati Eskandari
Assistant Public Works Director

MC:sc

c: Jason Uhley, Riverside County Flood Control and Water Conservation District
Hope Smythe, California Regional Water Quality Control Board-Santa Ana Region
Don Williams
Tom Koper, Principal Engineer

CITY OF RIVERSIDE

"People Serving People"

KVB 6/23

2005 JUN 22 AM 8:46

JES
HAS
CBR 6/23

June 22, 2005

Gerard J. Thibeault, Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside CA 92501-3339

RE: COMMENTS ON THE DRAFT MIDDLE SAR PATHOGEN TMDL

Dear Mr. Thibeault,

The City is concerned about the significant changes that have been made to the proposed basin plan amendment for a bacterial TMDL in the middle Santa Ana River (SAR). The City has been an active participant in the Middle Santa Ana River TMDL process since its inception in 2001. The stakeholder group was initially tasked with developing TMDLs for nutrients and pathogens in the middle Santa Ana River including the Chino Basin tributaries. The nutrient issues were quickly resolved which allowed the group to focus on violations of the Basin Plan objectives for fecal coliform. It was understood that the use of a fecal coliform indicator as a water quality standard would be changing in the future. Board staff made clear at that time that it would be necessary to move forward with a TMDL for that indicator in order to comply with deadlines dictated by the Clean Water Act and the courts. As we read the proposed amendment at this point in time, it appears that the scope has been significantly expanded. Specifically, numeric "targets" for E. Coli and a 10% margin of safety in the objectives have been added at the eleventh hour. The City requests that the Board remove numeric limitations or targets for E. Coli and provide clarification on the use of the safety factor it has proposed.

The inclusion of a numeric target for E.Coli is inappropriate since it is not a legally adopted standard. We agree with the staff report when it states that 126 E. Coli organisms/100 ml is correlated to the 200 fecal coliform organisms/100 ml but this is a tenuous relationship at best. Staff appear to be relying on the 1986 EPA criteria document for the proposed E. Coli target. By using this value they are assuming a risk factor that may not be appropriate for the water bodies in question. EPA recognizes in their draft guidance document that the historical risk factor for fresh water of 8 excess illnesses per 1000 exposed swimmers (approx. 200 fecal coliform) may not be appropriate when you consider that the marine risk factor is typically 19/1000. The State is free to adjust this factor within stipulated confidence levels. If the risk factor went from 8 to 10, the geometric mean for E. Coli would go from 126/100 ml to 205/100 ml. The question of what is the appropriate risk factor to use is being addressed by the Stormwater Quality

PUBLIC WORKS DEPARTMENT
3900 MAIN STREET • RIVERSIDE, CALIFORNIA 92522 • (951) 826-5341 • FAX: (951) 826-5622
SEWERAGE SYSTEMS DIVISION
5950 ACORN STREET • (951) 351-6140 • FAX: (951) 687-6978
www.RiversideCa.gov

Standards Task Force. Time should be given for them to complete this study. Further, to our knowledge, no studies have been done to determine the attainability or cost of attainment with the new standards. Staff is aware of these issues and is careful not to call the E. Coli numbers limits by substituting the word "target". The problem is that a "target" is not defined in the amendment. What happens if you exceed a target? Does the Board have the authority to require any action based on the failure to meet a target? If it does then it is not a target, it is a standard. If it doesn't then what is the point? Regulatory agencies such as USEPA and non-governmental organizations have a habit of interpreting goals and targets as hard limits. Numeric limits or targets should not be introduced into the Basin Plan until they have gone through the formal standard setting process.

We have reviewed the E. Coli database developed for this TMDL and it seems possible that the main-stem of the SAR may comply with the new standards given allowable risk factors. The Board should first adopt the new pathogen standards, review the use designations and then determine if a TMDL is necessary. This amendment suggests a standard and an associated WLA when it might not be needed.

The use of a safety factor may be appropriate but the proposed amendment needs to be clear where that standard must be met. We would argue and we hope the Board agrees that it is not appropriate at the point of use. For example since the main-stem of the SAR is designated REC-1 and the REC-1 standard is 200 fecal coliform /100 ml, then if the geometric mean of samples taken in the main-stem is less than or equal to 200, the river is in compliance. A run-off entering the stream could be limited to 180 organisms/100 ml to address uncertainty in the waste-load allocation. If re-growth is a concern then the safety factor should only apply to water before it gets to the REC-1 designated waters. Ambient samples taken at the EPA study sites used to develop the criteria should have had the same or higher re-growth potential as the SAR. The point here is that there is no reason to believe that water swallowed at the criteria development site would be any less harmful than water with the same coliform (or E. coli) contamination at this site. If there is a reason to think that the conditions in the SAR are fundamentally different then the entire standard setting process would be in question. It is, therefore, our position that a safety factor at the point of use is not appropriate. If a safety factor is to be applied, further clarification including where the standard applies, is necessary.

If the Board feels that they must include E. Coli targets then we request that the single sample maximum be removed or modified. EPA's proposed criteria includes four possible classifications for single sample maximum allowable density. These values are meant as management tools. Unlike maximum criteria used in toxic standards, these numbers do not relate to an acute endpoint or time of exposure. The following example reflects our understanding of how the single sample maximum is meant to work and what it means: Lets say your standard is a geometric mean of 126 organisms /100 ml. We know that there are a lot of things that can affect the individual value you get for each sample and we represent those differences by the log standard deviation (.4 for freshwater). If you think of a bell curve the log standard deviation represents how wide the bell is around the 126 mean. Lets say that the water is at a mean standard of 126 and

that you go out and take ten days of samples. The value of those individual samples will randomly fall above on or below the 126 mean within this bell. If you graph the bell and call the left side 0 and the right side 100% with the middle (126 mean) equal to 50% you can see what EPAs numbers mean. The first classification listed by EPA is the Designated Beach Area. It is set at the upper confidence level of 75% . That means that going from left to right across the curve the point where you have covered 75% of the area of the curve is the 75th confidence level. In this case that is 235 E. Coli/ 100ml. That is for a mean of 126 with a .4 std. dev. 75 % of all the samples you take should be at or below 235 / 100 ml. The problem here is that that also means that 25 % of the samples you take that are part of the otherwise compliant sampling effort will be above this line. To complete the example on the other end, if you used the classification of Infrequently Used Full Body Contact Recreation with its 95% confidence level the single sample maximum would be at 576 E. Coli /100 ml (95% of the area under the bell).

As was stated at the outset, this is meant to be a management tool. If you take one sample a week and you have a result of 250 E. Coli /100 ml you could say I'm probably under the bell but since I've got 50,000 people at the beach the stakes are high and I may want to keep them out of the water until I can take some more samples and confirm that its in the bell. On the other hand if you have a few people using the water you could say that the relative risk is acceptable and I'll assume it's in the bell until the next mean is calculated. One of the things that the Board will have to determine in the future is how single sample exceedances will be looked at when determining if a water body needs a TMDL since you can and will have singe sample exceedances while you are complying with geometric mean standards.

Tying this in with our previous comment; if we aren't going to be managing based on the "target" value then the single sample maximum isn't needed and should not be included in this amendment.

Lastly, should the Board determine that they want a single sample maximum we request that it be based on something other than the requirement for a "Designated Beach Area". As was stated earlier, EPA proposed four different categories of use and associated maximum allowable densities. What they didn't put in the criteria documents are definitions of those categories. The definitions will have to be formulated at the time of standard setting by the Board. For the sake of this discussion let us assume conservative definitions as follows:

Category	Average Daily Usage (swimmers/day)
Infrequently Used Full Body Contact	1 or less
Lightly Used Full Body Contact	10 – 2
Moderate Full Body Contact	100 – 11
Designated Beach Area	101 or greater

(These numbers may be overly conservative depending on the spatial and temporal considerations used in calculating averages.)

Based on the Van Buren Blvd. bridge crossing recreational use survey performed by the City in the summer of 2004 and on preliminary data from a more widespread and longer term study being performed by Wildermuth Environmental, the annual average daily use along the upper zones of the Santa Ana River would likely fall between the "Infrequent" and "Lightly Used" categories. (Note: Van Buren Survey 7/1/04-10/16/04, 60 days of data, total 101 people in contact with the SAR water, 1.7 people/day average, does not include people in the reclaimed water effluent channel.) Although the data is minimal and the criteria for use categories is only useful for illustrative purposes, it is clear that the upper SAR is not equivalent to a designated Beach Area like Newport or Laguna. We respectfully request that if the Board includes a single sample maximum for E.coli in this amendment, that it be based on the Lightly Used Full Body Contact Recreation category. This number can be refined when the standard setting process is complete and the use categories have been formally determined.

Thank you for the opportunity to comment on this important amendment. If you have any questions please call me at (951) 351-6011.

Sincerely,

Rodney W. Cruze

Rodney W. Cruze
Operations Manager
Riverside Regional Water Quality Control Plant
5950 Acorn Street
Riverside, CA 92504

CC: *Hope Smythe, RWQCB*
Siobhan Foster
Steve Schultz
Sandy Caldwell
file

PW064-05

OFFICE OF: PUBLIC WORKS DEPARTMENT

P.O. BOX 940, CORONA, CALIFORNIA 92878-0940

(951) 736-2447
(951) 279-3613 (FAX)
atie@ci.corona.ca.us

CORONA CITY HALL - ONLINE, ALL THE TIME (http://www.discovercorona.com)

June 23, 2005

Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Comments for the Middle Santa Ana River Bacterial Indicator TMDL Public Workshop- June 24, 2005

Ladies and Gentlemen of the Board, as an incorporated city identified within the Middle Santa Ana River Watershed and thus subject to the proposed bacterial indicator TMDL and associated urban Waste Load Allocation, the City of Corona would like to take this opportunity to address the following two items. We hope that the Board would consider these items at the Public Workshop for a Review of Provisions to Incorporate a Middle Santa Ana River Bacterial Indicator TMDL into the Water Quality Control Plan for the Santa Ana River Basin Plan (Basin Plan) scheduled on June 24, 2005.

First Item- Dry Weather Compliance Schedule

The City of Corona operates 3 wastewater treatment plants with a combined treatment capacity of 15 MGD, serving a population of approximately 141,000 and associated businesses.

Assuming that dry weather flows from urban areas within the Temescal Canyon sub-watershed are found to be a leading source of bacteria to the impaired waterbodies, one of the alternatives to meet the proposed pathogen TMDL could be diversion of dry weather flows from the municipal storm drainage system to a treatment plant for treatment and discharge back into the receiving waters. Other alternatives to address dry weather and first flush flows must also be considered during TMDL implementation and could include regional BMPs identified through the regional study performed by the Riverside County Permittees as required by the Riverside County MS4 NPDES Permit.

Currently, the wastewater treatment plants operated by City of Corona do not have capacity to treat additional flows from non-sanitary sewer sources. One or all of the treatment plants would have to be upgraded to accept the additional flows. In addition, there are specific concerns regarding toxicity that may be found in dry weather runoff. The effluent limits designated in our POTW NPDES permit are consistent with the

California Toxics Rule and the adopted State policy for implementation of toxic standards for inland surface waters, enclosed bays and estuaries. Unlike other local agencies that treat urban runoff and discharge to the ocean, inland POTW must consider stringent toxic effluent limits in the treatment design process. The concentration of these constituents in urban runoff must be characterized and treatment methods carefully selected.

The initial study and design of any treatment method and diversion process to address dry weather runoff cannot begin until a multi-agency planning effort is formed, monitoring is performed, and budgeting is found. In particular, pathogen contribution from each agency discharging to the Temescal sub-watershed must be identified such that costs are fairly shared. Exhibit A shows surrounding jurisdictions within this sub-watershed. Accordingly, the alternatives to meet dry weather TMDL compliance cannot be developed until at least Tasks 3 and 4 of the proposed TMDL Implementation Plan have been implemented.

We believe that a feasible timeline to implement a dry weather diversion treatment alternative more appropriately follows this approximate schedule:

- Complete initial source studies and monitoring to determine pollutant levels and appropriate treatment alternatives – 2.5 years
- Determine feasibility and complete preliminary design – 2 years
- Complete planning and EIR process– 1.5 years
- Secure funding – 1 year
- Complete final design and construction – 2 years

Public agencies must also consider budget cycles when undertaking a large scale project effort, which could extend the proposed schedule. For this reason, a more reliable schedule to achieve dry weather compliance would be approximately 10 years from the adoption of the TMDL if this alternative were selected. This is also consistent with our recent experience which took approximately 8 years to accomplish a 6 MGD plant upgrade from EIR to completion.

Also of note, treatment costs for the additional flow would incur roughly an additional operating cost of $2.1 million annually, assuming 6 cfs of dry weather flow is diverted and treated at a daily cost of $1,145 per MGD to treat. This cost does not include collection system operation and maintenance, which we anticipate could be as much as twice the cost to treat. Therefore securing on-going funding sources must also be considered in the implementation schedule.

Second Item- Temescal Sub-watershed Contribution to Pathogen Impairment

As stated in our letter to the Regional Board on June 7, 2005, we would like to take this opportunity to address the drainage characteristics of the Temescal Canyon Sub-watershed in relation to the Santa Ana River-Reach 3 (SAR-3) and Prado Dam Basin. The Temescal Creek and SAR-3 drain into the Prado Basin Management Zone. As shown on Exhibit B, the Prado Dam Basin 100-year floodplain creates this management zone. However, there is not a true confluence between the Temescal Creek and SAR-3 as indicated in the Basin Plan. Flows are spread in dense vegetation

and do not move along a flow path as they do in the upstream segments, creating a wetland environment. All sampling as part of this TMDL study were collected along the SAR-3 upstream of the Basin. Some sampling was performed downstream of the Prado Dam along SAR-2, however all Chino Basin streams, SAR-3 and Temescal are tributary to this point. Water quality at this site is also affected by wetlands processes in the Prado Basin. Thus it seems inconclusive that the Temescal watershed contributes to the pathogen impairment identified for SAR-3 and we believe should not be included in this TMDL.

Thank you again for this opportunity to comment. If you have any questions please contact me at (951) 736-2447.

Sincerely,

Ati Eskandari
Assistant Public Works Director

Enclosures

c: Jason Uhley, Riverside County Flood Control and Water Conservation District
Hope Smythe, California Regional Water Quality Control Board-Santa Ana Region
Bill Rice, California Regional Water Quality Control Board-Santa Ana Region
Brad Robbins, Asst City Mgr/DWP Gen Mgr
Amad Qattan, Public Works Director
Don Williams, Assistant General Manager
Tom Koper, Principal Engineer

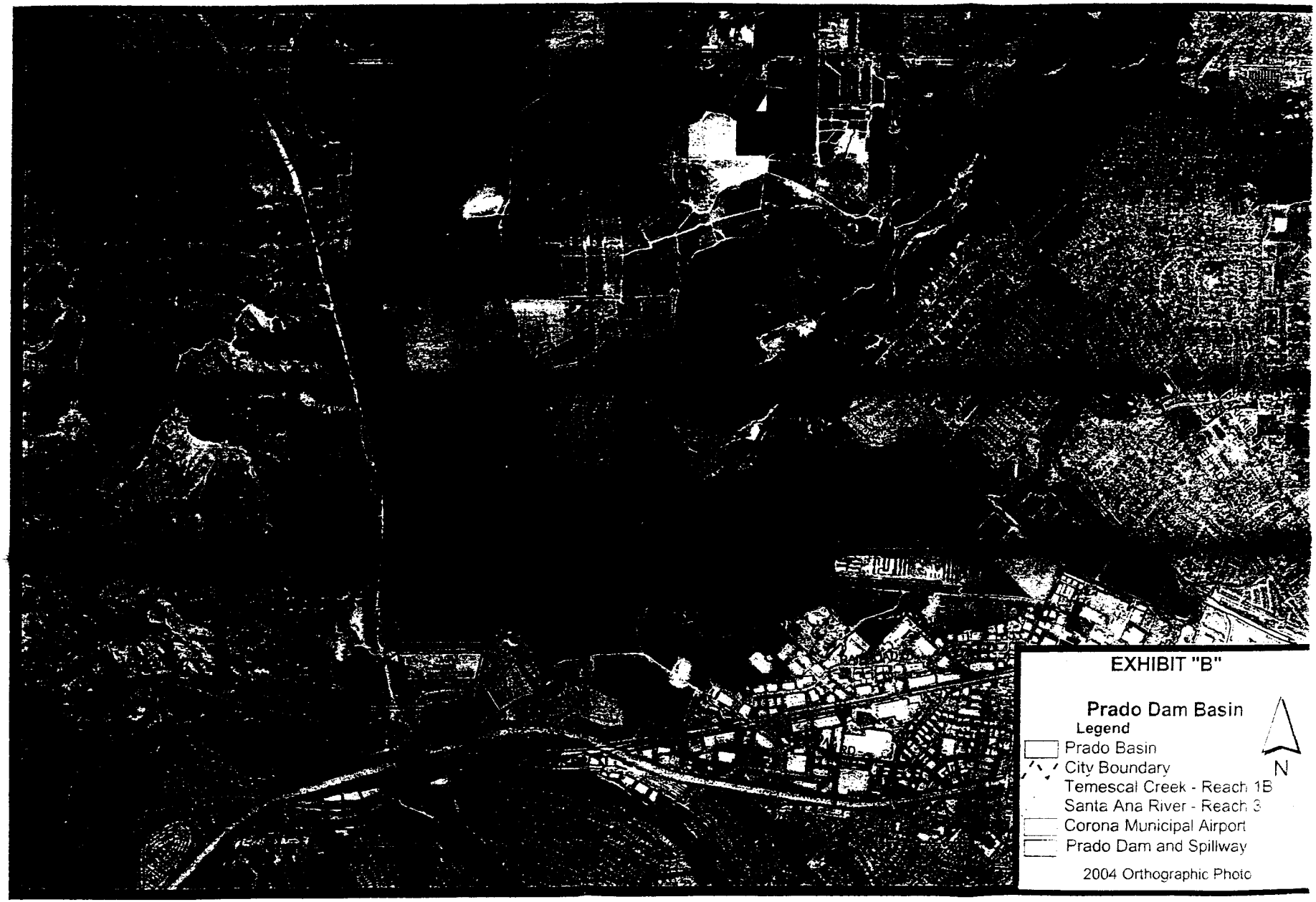


EXHIBIT "B"
Prado Dam Basin
Legend
Prado Basin
City Boundary
Temescal Creek - Reach 1B
Santa Ana River - Reach 3
Corona Municipal Airport
Prado Dam and Spillway
2004 Orthographic Photo
N

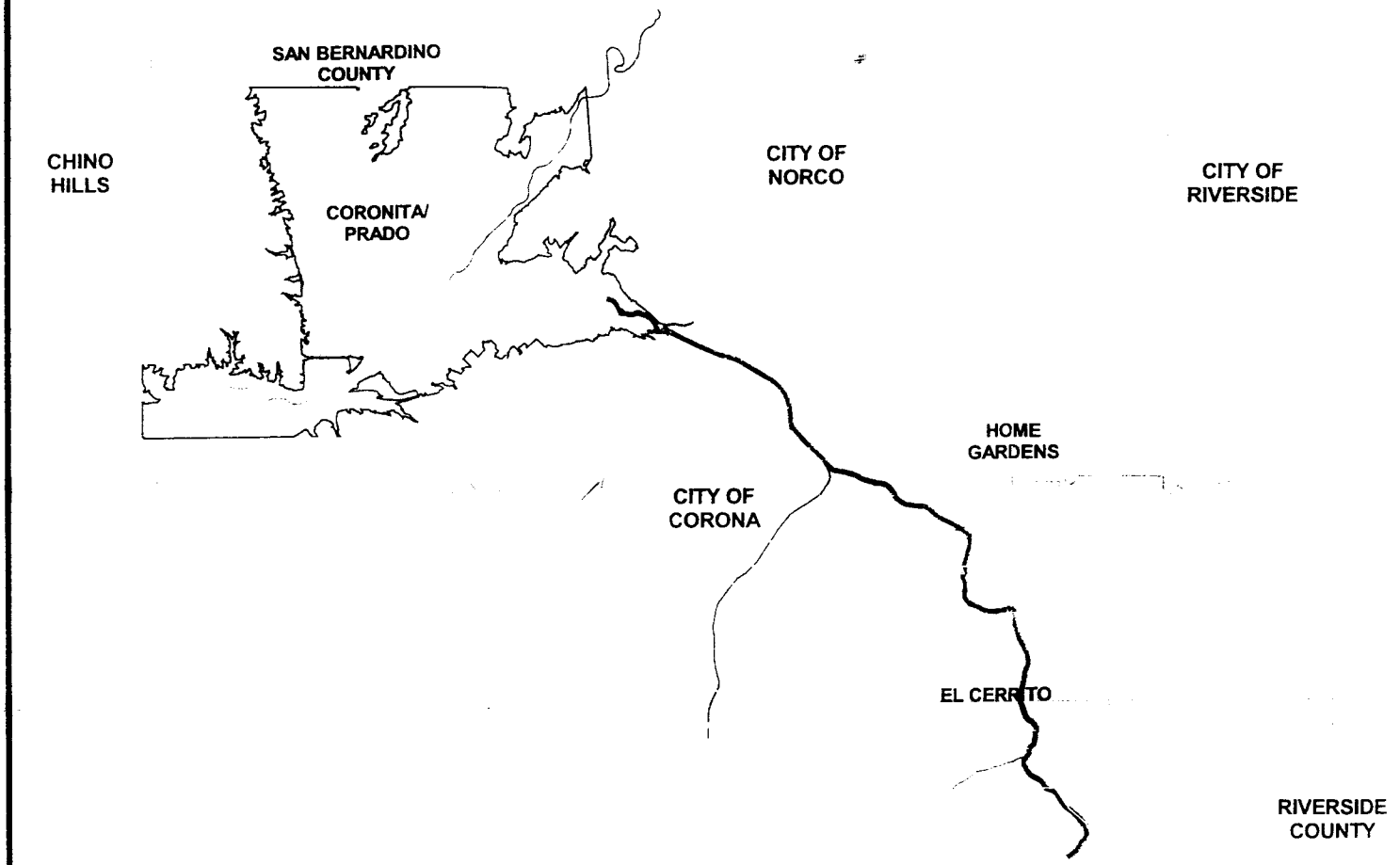
EXHIBIT "A"

Temescal Creek Sub-Watershed Surrounding Areas

Legend

- Prado Basin
- Santa Ana River - Reach 2
- Santa Ana River - Reach 3
- Temescal Creek
- Joseph Canyon Wash
- Bedford Canyon Wash
- Main Street Channel
- Oak Street Channel
- Mabey Channel
- Mangular/Oak Street Channel
- City of Corona
- Norco
- Orange County
- Chino Hills
- San Bernardino County
- Riverside County
- City of Riverside

N



VARREN D. WILLIAMS
neral Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
951.788.9965 FAX
www.floodcontrol.co.riverside.ca.us

HAY 711

2005 JUN 28 PM 3:39

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

June 24, 2005

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality
Control Board - Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Dear Mr. Thibeault:

Re: Comments on Draft Middle Santa Ana River Bacterial Indicator Basin Plan Amendment

The Riverside County Flood Control and Water Conservation District (District) is a Municipal Separate Storm Sewer System (MW4) operator and serves as the Principal Permittee on all of Riverside County's MS4 Permits. The District has also been participating in the TMDL workgroup since June 2001 and in the Santa Ana Stormwater Water Quality Standards Task Force (Task Force) since its inception. The District is submitting the following comments on the Draft Middle Santa Ana River Bacterial Indicator TMDL, Basin Plan Amendment (BPA), and Supplemental Staff Report dated February 3, 2005.

The District stands by the original comments in our letter dated March 10, 2005 and submits the following additional comments.

2012 Implementation Date for Dry Weather Flows

Although dry weather flows from urban sources are minimal and generally infiltrate prior to receiving waters, seven (7) years is not adequate time to budget, design, construct and implement capital improvements necessary to divert dry weather flows from MS4s to treatment facilities. Further, setting 2012 as a compliance deadline to achieve numeric targets for dry weather flows would require planning efforts for such facilities prior to the completion of the Task Force effort. This may lead to wasted public dollars. The following table shows District MS4 facilities that outlet into Reach 3 of the Santa Ana River and associated costs in the installation of a diversion system consisting of inflatable dams/temporary storage, piping and pump stations to divert anticipated dry weather flow to existing publicly-owned treatment works (POTWs). It should be noted that the District is merely demonstrating anticipated costs of a diversion alternative and does not reflect the opinions of other public agencies or operators of area POTWs.

Estimated BMP Costs at District MS4 Outlets to Santa Ana River, Reach 3

MS4 Outlet	Dist. to POTW	Est. Cost
Box Springs Drain, Stg. 1	3.5 mi.	$ 1,108,800.00
Magnolia Center SD, Stg. 1	2.6 mi.	$ 823,680.00
Phoenix Ave. SD	1.9 mi.	$ 601,920.00
Sunnyslope Channel, Stg. 4	2.4 mi.	$ 760,320.00
Pedley 64th St. SD	1.9 mi.	$ 601,920.00
Anza Channel, Stg. 1	.3 mi.	$ 95,040.00
San Sevaine Channel, Stg. 5	2.9 mi.	$ 918,720.00
Day Creek Channel, Stg. 6	5.5 mi.	$ 1,742,400.00
Eastvale MDP Line B2, Lat. B3	2.4 mi.	$ 760,320.00
Eastvale MDP Line D (2002 Imprv.)	2.4 mi.	$ 760,320.00
North Norco Channel, Stg. 8	1.9 mi.	$ 601,920.00
South Norco Channel, Stg. 1	3.3 mi.	$ 1,045,440.00
Temescal Creek Channel, Stg. 3 & Oak St. Channel, Stg. 1 Confluence	3.3 mi.	$ 1,045,440.00
Mobile Industrial Pumps (100' head, 5 max. working at any time on any line)	N/A	$ 30,000.00
Total Temporary Diversion System Cost		***$ 10,896,240.00***

The estimated costs outlined above only includes pipe installation and pumps needed to transport dry weather flows collected in temporary storage at District facility outlets. These costs **do not** include temporary storage (i.e., underground detention vaults), treatment plant expansion and operational costs, any electrical or fuel requirements, outlet retrofit, operation and maintenance. Most importantly, please note that the District is merely demonstrating anticipated costs of a diversion alternative and **does not** reflect the opinions of other public agencies or operators of area POTWs.

As the table shows, even a simple solution of diversion of dry weather flows to existing POTWs can be cost prohibitive. Procurement of such a large amount of funds may require public agencies to move toward a special election in order to gain voters' approval of increased fees to fund TMDL compliance. This can be viewed as an uphill battle in the Inland Empire – the demographics of this area tend to be more conservative than those of Southern California's coastal communities.

The District recommends extending the target compliance date for dry weather flows to 2015. This will give public agencies approximately nine years to complete the work of the Task Force relating to appropriate Recreation use designations and corresponding objectives, conduct source investigations, explore emerging pathogen control BMPs and seek funding for capital projects or retrofits.

Interim *E. Coli* Standard

The District would like to clarify comments made in our March 10, 2005 letter to the Regional Board. The District's position **was not to suggest the implementation** of an interim *E. coli* standard at this time, but was to suggest that implementation of the TMDL should occur only after an appropriate indicator and numeric target for pathogen indicators have been determined by the Task Force. While we understand the Regional Board's need to fulfill a commitment to complete this TMDL, we believe the inclusion of an interim *E. coli* standard at this time would be counterproductive to the efforts of the Task Force.

Reporting Periods

The District is cognizant of the importance of monitoring data from sampling activities conducted throughout the year. The addition of sites and increased frequency of bacterial TMDL sampling requires additional staff time and labor costs, and the requirement for quarterly reporting will be an additional increase on the demand of staff time. The District recommends annual reporting in place of quarterly reports such that compiling the TMDL monitoring reports may be incorporated into the regular annual reporting process associated with the MS4 permits. These annual reports would be available to accompany the proposed triennial reports in the TMDL.

The District is committed to cooperating with the Regional Board and other stakeholders in developing and implementing programs to manage Urban Runoff. The District also has a duty to the citizens of Riverside County to practice responsible government and utilize taxpayer monies on projects and programs that guarantee benefits commensurate with their costs. Our comments are submitted in the spirit of this commitment and our duty to practice responsible government.

The District appreciates the opportunity to comment and work proactively with Board staff in the development of this TMDL. If you have any questions, please contact Jason Uhley of our Regulatory Division at 951.955.1273.

Very truly yours,

S. E. Stump

STEPHEN E. STUMP
Chief of Regulatory Division

Attachments
c: Co-Permittees
San Bernardino County Flood Control
Attn: Matt Yeager
ABC:cw
PC/95362